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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,144	12/27/2000	Ronald Martin Horn	1585-257	3292
30024	7590	09/16/2004		
NIXON & VANDERHYE P.C./G.E. 1100 N. GLEBE RD. SUITE 800 ARLINGTON, VA 22201				
			EXAMINER HARTMAN JR, RONALD D	
			ART UNIT 2121	PAPER NUMBER

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,144

Applicant(s)

HORN ET AL.

Examiner

Ronald D Hartman Jr.

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-2 and 4-6 are presented for further examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 5-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Uchida et al., U.S. Patent No. 5,817,958.

As per claims 1 and 5-6, Uchida teaches a method comprising:

- receiving input water chemistry characteristics over a global computer network (e.g. Figure 14 element 49; "Water Chemistry", element 51; "Plant Parameters" and C19 L19-38; "The place where the residual life evaluating system is installed is not limited to a central control room of the plant. ... Therefore, the system may be installed in another plant facility);
- accessing a crack growth behavior model that predicts component crack behavior according to the input water chemistry characteristics; (e.g. C6 L56-65; "When the plant ...analysis of the plant chart, and evaluation base on the prediction models,... to take systematic actions; and Figure 14 elements 11 and 55); and
- outputting over the global computer network a crack growth prediction profile according to an analysis of the crack growth behavior model (e.g. Figure 14 element 48 and element OUTPUT: and C12 L26-55, "Supplied to the plant chart are record information ... provide security program information.) by outputting a real time

crack growth prediction according to the input water chemistry characteristics. (i.e. the disclosed system and method of Uchida et al has the capability of performing this function since data about the crack is used to determine the residual life of the system, See Figure 14 element 55 and C12 L42-55, and it is noted that "real time" is interpreted to involve a delay and thus Uchida anticipates this feature since a delay must be present in any controlled system).

As per claim 2, Uchida teaches generating a graphical representation of a crack growth according to the input water characteristics (e.g. Figure 14 element 48a and C17 L13-27; "The evaluation result is indicated on the display screen... is quantitated depending on the personality of the plant.).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida, as applied to claim 1 above.

As per claim 4, although Uchida does not specifically teach a server with a server program, it would be obvious to one of ordinary skill in the art, at the time the invention was made, since Uchida clearly anticipates the use of his system in a networked manner; that is, by allowing the facilities to communicate with another; and since a server would obviously be used for the database, its inclusion into Uchida would be

equally obvious since it would allow for a convenient means of storing pertinent data and would easily facilitate any and all communications between the multiple facilities.

Therefore, for at least these reasons, the inclusion of a server and server program would have been obvious to one of ordinary skill in the art at the time the invention was made.

By way of explanation, this rejection is considered to be grounded upon common knowledge. While the applicant has not challenged this conclusion, the reference of Yoshida et al., U.S. Patent No. 6,327,510 is cited in support of this position in order to more fully complete the record, and the inclusion of the server into a networked system would have been obvious to one of ordinary skill in the art at the time the invention was made for the purpose of allowing an automated way of remotely monitoring the nuclear reactor and therefore would alleviate the need for a human operator to consistently check the reactor, and would also avoid the need for the operator to be physically located at the reactor.

AC
9/14/04

Response to Arguments

5. Applicant's arguments and amendments filed on 6/1/2004 have been fully considered but they are not persuasive for the following reason(s):

The applicants asserts that Uchida et al does not specifically teach outputting a real time crack growth prediction according to the input water chemistry characteristics.

The phrase "real time" has been interpreted as involving some time delay between the observation and the output. This definition is consistent with the applicant's specification (See page 8). Therefore, the amount of delay is of little patentable significance. However, this is not to be considered an admission that Uchida has a large delay since the reference is silent on this point.

That being said, the examiner respectfully disagrees that Uchida et al does not teach outputting growth prediction's as they occur since Uchida et al clearly teaches that the behavior of a crack is used by a residual life evaluating routine so that the performance and conditions of the nuclear power plant may be effectively monitored so that corrective measure's may be implemented before a crack diminishes the

effectiveness of the nuclear reactor past critical values. Therefore, since this appears to be the only argument set forth in the Response dated 6/1/2004, the previous rejection using Uchida et al., U.S. Patent No. 5,817,958 is once again applied, and is repeated below, including the newly added features, and this action is made **FINAL**.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D Hartman Jr. whose telephone number is 703-308-7001, and after October 12, 2004, (571) 272 - 3684. The examiner can normally be reached on Mon. - Fri., 11:30 am - 8:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179, and starting October 12, 2004, at (571) 272 - 3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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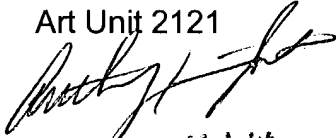
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDH
9/14/04

Ronald D Hartman Jr.

Examiner

Art Unit 2121


Anthony Knight
Supervisory Patent Examiner
Group 3600